The New Horizon

NEW WIDE BAND ALL MODE RECEIVER

AR5000

RS-232C Command List



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(DELIMITTER···[CR][LF])

	REQUEST COMMAND		SETTING	. NOTE	
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting [CR+LF]		
-Rx-FREQ	Vn	w	Vxnnnnnnnnn (Hz)···Vx=VA/VB/VC/VD/VE Vxnn.nn (MHz)	-kHz indicated below 30MHzFREQSETTING	
	RF	w	RFnnnnnnnn(Hz) RFnn.nn(MHz)		
	RX [CR]	R	The present receiving mode is shown.		
		R	MS MXnnn MPn GAn REnnannanna Standann Aun MDn Ata TMXXXXXXXX	-M-SCAN MODE	
		R	SM MXnnn MPn GAn REnnnnnnnnn STnnnnnn AUn MDn ATn TMxxxxxxxx	-MSEL MODE	
		R	MR MXnnn MPn GAn REnnnnnnnnn Stannann Aun MDn Ath TMXXXXXXXX	-MEM MANUAL MODE	
		R	SSn RFnnnnnnnn STnnnnn AUn MDn ATn TTxxxxxxxx	-SEARCH MODE	
		R	VS Vn REnnnnnnnn STinninn AUn MDn ATn TTxxxxxxxx	-VFO-SEARCH MODE	
		R	Vn REnnnnnnnn STnnnnnn AUn MDn ATn(Vn···n=A/B/C/D/E)	-VFO-MODE	
	MSn [CR]	w	n=0-9···DEFULT=CURRENT MEM-BANK	-M-SCAN MODE	
	SM [CR]	W		-MSEL MODE	
	MRmnn [CR]	W		-MEM MANUAL MODE	
	SSnn [CR]	W	n=00-19DEFULT=CURRENT SEARCH-BANK	-SEARCH MODE	
	VSx [CR]	W	x=A,B,C,D,EDEFULT=CURRENT VFO	-VFO-SEARCH MODE	
	Vx [CR]	W	x=A,B,C,D,E	-VFO-MODE	

-AGC-LEVEL	LM···	R	LMnn···nn=00-FF(AGC-LEVEL is transmitted(256 steps). SQ-ON) LM%nn···nn=00-FF(AGC-LEVEL is transmitted(256 steps). SQ-OFF)	←When SQ is open. ←When SQ is close(w/%)
-AGC-LEVEL	LC···	w	LCn··· AGC-LEVEL SEND=OFF···n=0 AGC-LEVEL SEND=ON···n=1	-n=1 -AGC-LEVEL is transmitted when SQ-ON.
	LC···	R	LCnn···nn=00-FF(AGC-LEVEL is transmitted(256 steps). SQ-ON) LCnn RFnnnnnnnnn	-BANK#(MXn/SRn)

RS-232C COMMAND LIST

			(Seeming Configuration	1.3. 5	
ITEM	REQU	EST COM	MAND	SETTING	
I I CM	CMD/I	HÉADER	R/W	DELIMITTER is added after setting[CR+LF]	NOTE
-∆(IEH)			w	UP···FREQ or CH-UP	
-∇(IFH)			W	DOWN···FREQ or CH-DOWN	
-EXIT	EX	[CR]	W	EX···OFF RS-232C	
-POWER OFF	QP	[CR]	w	QP···POWER OFF	
-version info	V R		R	VER-nnVERSION INFORMATION	-EEPROM ADDRESS=0EFF0-0EFF1nn.nn
-x	х		w	X···POWER-ON	-With either key, turn on.
-REMOTE	RQ		w	RQnnn···nnn=0-255	
SQ-DATA	RQ	[CR]	R	RQ nnn or RQ+nnn(+···SQ-ON)	
VL	٧١		w	VLnnnnnn=0-255	
VL [CR]	٧L	[CR]	R	VLnnn	
-cw-Pitch	CW		w	CWn···n=0-7 400Hz···n=0 500···n=1 600···n=2 700···n=3 800···n=4 900···n=5 1000···n=6 1100···n=7	
	CW	[CR]	R	CWn	

(DELIMITTER---[CR][LF])

	REQUI	EST COM	MAND	SETTING	NOTE
ITEM	CMD/H	EADER	R/W	DELIMITTER is added after setting[CR•LF]	NOTE
-CYBER-SCAN ON/OFF	DS···		W	DSn··· CYBER-SCAN OFF···n=0 CYBER-SCAN ON···n=1	
	DS	[CR]	R	DSn	
-AUTO ON/OFF	AU		w	AUn AUTO-OFF···n=0 AUTO-ON···n=1	- The following item is set up automatically when AUTO-ON. STEP,MODE,BW,LPF,HPF,DE-ENPHASIS
	AU	[CR]	R	AUn	
-MODE	MD		w	MDn FM···n=0 AM···n=1 LSB···n=2 USB···n=3 CW···n=4	-LPF, HPF, DE-EMPHASIS matched to BW is set up automaticallyAUTO-MODE is cleared automaticallyAGC-CONTROL is set up automatically.
	MD	[CR]	R	AUn MDn	
-STEP-FREQ	ST···		w	STnnnnnn /+(Hz)···[+]==>STEP-ADJ ON STnn.nn/+(KHz)···[+]==>STEP-ADJ ON ST+···[+]==>STEP-ADJ ON/OFF	-AUTO-MODE is cleared automaticallySTP-ADJ ON…[+]
	ST	[CR]	R	STnnnnnx(Hz)···X=+(STEP-ADJ ON)	

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RS-232C COMMAND LIST

(DELIMITTER...[CR][LF])

	REQUEST COM	IMAND	SETTING	
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR+LF]	NOTE
-STEP-ADJ	SH···	w	SHnnnnn(Hz)···nn···n=0.00==>STEP-ADJ OFF SHnn.nn(KHz) SH+···[+]==>STEP-ADJ ON/OFF	-AUTO-MODE is added after settingSTP-ADJ ON…[+]
	SH [CR]	R	SHnnnnnx (Hz)	
-SUB—STEP	SJ···	w	SJn···n=0-A MAIN···n=0 x 10···n=1 100 Hz···n=2 500···n=3 1 KHz···n=4 5 KHz···n=5 10 KHz···n=6 50 KHZ···n=7 100 KHz···n=8 500 KHz···n=9 1000 KHz···n=A	
	SJ [CR]	R	SJn	
-ATT	AT···	W	ATn ATT 0dB···n=0(AUTO-ATT=OFF) ATT 10dB···n=1(//) ATT 20dB···n=2(//) ATT AUTO···n=F(AUTO-ATT=ON)	0dB/10dB/20dB…RX=0.005-230.0M 0dB/10dB…RX=230M-1000.0M 0dB…RX=1000M-2600M
	AT··· [CR]	R	ATOn···n=Oorlor2···AUTO-ATT=OFF ATIn···n=Oorlor2···AUTO-ATT=ON	

(DELIMITTER...[CR][LF])

	REQUEST COM	MAND	SETTING	NOTE
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR-LF]	NOTE
-ANTENNA	AN	w	ANn…n=0-4(0=AUTO)	
	AN [CR]	R	ANn or AND n···AUTO-ANT==>ANO n	
-BAND WIDTH	BW··· BW [CR]	¥	BWn 0.5 K···n=0 3 K···n=1 6 K···n=2 15 K···n=3 40 K···n=4 110 k···n=5 220 k···n=6	-AUTO-MODE is cleared automaticallyLPF,HPF,DE-EMPHASIS matched to MODE is set up automatically.
		R	BWn	
-LPF	LP LP [CR]	w	LPn 3 K···n=0 4 K···n= 6 K···n=2 12 K···n=3	-AUTO-MODE is cleared automaticallySet up automatically by MODE & BW setting
		R	LPn	
-НРЕ	HP··· HP [CR]	w	HPn 0.05 K···n=0 0.2 K···n= 0.3 K···n=2 0.4 K···n=3	-AUTO-MODE is cleared automaticallySet up automatically by MODE & BW setting
		R	HPn	

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RS-232C COMMAND LIST

(DELIMITTER...[CR][LF])

	NS 2320 COMMAND EIST		(DECIMIT ER[CR3[CP])	
TTL	REQUEST COM	IMAND	SETTING	
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR·LF]	NOTE
-DE-ENPHASIS	EN··· EN [CR]	w	ENn 25 us···n=0 50 ···n=1 75 ···n=2 750 ···n=3 THRU ···n=4	-AUTO-MODE is cleared automaticallySet up automatically by MODE & BW setting
		R	ENn	
-AGC CONTROL	AC AC [CR]	w	ACn FAST···n=0 MIDDLE···n=1 SLOW···n=2 OFF···n=F	-Automatic setting when AUTO-MODE.
		R	ACn	
-EEPROM -BANK SELECT	BN··· BN [CR]	w	BNn BANK-0n=0 BANK-1n=1	-When BANK is changed, system is initialized.
		R	BNn	

(DELIMITTER...[CR][LF])

	REQUEST CO	MMAND	SETTING	NOTE
ITE M	CMD/HEADER	R/W	DELIMITTER is added after setting[CR-LF]	NOTE
-CTCSS-FREQ	CN···· CN [CR]	w	CNnn···nn=06-37(BINARY) CTCSS OFF···nn=00 CTCSS ON WITH SEARCH···nn=01	
		R	CNnn···nn=00==>CTCSS-OFF/nn=01==>CTCSS-OFF	
-DTMF ON/OFF	QM··· QM [CR]	w	QMn DTMF OFF···n=0 DTMF ON···n=1	-DTMF data is transmitted one after another.
		R	QMn	
-TONE	LS	w	LSnnnnnn=0-255(000=OFF)	
ELIMINATE FREQ	LS [CR]	R	LSnnn or LS+nnn(+···MUTE-ON)	
-SCRAMBLE DATA	sc··· sc [cr]	w	SCnnn···nnn=000-127(BINARY) DE-SCRAMBLE OFF···nnn=000 DE-SCRAMBLE ON···nnn=1-127	
		R	SCnnn	
-EXIT-IF	Al··· Al [CR]	,w	AIn EXIT-IF OFFn=0 EXIT-IF ONn=1 EXIT-IF 2 ONn=2	
		R	Ain	

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RS-232C COMMAND LIST

ITCU	REQUEST COM	MAND	SETTING	
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR-LF]	NOTE
-MANUAL -TUNE or	MT··· MT [CR]	w	MTn… MANUAL-TUNE OFF…n=0 (AUTO-TUNE) MANUAL-TUNE ON…n=I	
AUTO-TUNE		R	MTn TUnnn	-MANU-TUNE
-TUNE SELECT	TU··· TU [CR]	w	TUnnnnnn=000-255	
		R	TUnnn	
-VFO LEVEL-SQ	DB··· DB [CR]	w	DBnnnnnn=000-255 L-SQ OFFnnn=000	
		R	DB non or DB+nnn(+…CURRENT AGC-LEVEL ≥n)	
-VFO VOICE-LEVEL	DA··· DA [CR]	w	DAnnn VOICE OFF···nnn=000	
		R	DA nnn or DA+nnn(+CURRENT VOICE-LEVEL≥n)	
-VFO DELAY -TIME	DD··· DD [CR]	w	DDnn···nn=0.0-9.9(sec)···No need for decimal point DELAY OFF···nn=00	
		R	DDn.n	

(DELIMITTER...[CR][LF])

	REQUEST COM	MAND	SETTING	NOTE	
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR+LF]		
SEARCH SETTING	SE···	w	SEnn···nn=00-19(nn=BANK #) SLnnnnnnnnnn(START-FREQ) SUnnnnnnnnnn(STOP-FREQ) AUn STnnnnnn/SHnnnnn···Set up if necessary. MDn,BWn,LPn,HPn,ENn···Set up if necessary. ATn,AHn,ACn···Set up if necessary. TTxxxxxxxxx(TiTLE)···Set up if necessary.	-Divided with SP(space). -LC-CMD····RESET ◎	
	TT···	w	TTxxxxxxxx···(X=20-5F···ASCII-CODE)	-SP is effective as BLANK.	
-SEARCH LISTING	SRnn	R	SRnn···n=00-19(nn=BANK #) SRnn SLnnnnnnnnn SUnnnnnnnnn STnnnnn AUn MDn ATn TTxxxxxxxx SR%···ALL-BANK		
-DELETE SEARCH WITH PASS-FREQ	QS···	w	QSnn···nn=00-19 or BLANK(nn=BANK #)		
-SEARCH-LINK GROUP #	GS···	w	GSn···n=0-9		
	GS [CR]		GSn SDn n SB+n SA+nnn SPnn ASn BQn BS n n···n n···n n···n n(n=0-9 or -) GS%%···l0 groups from the next is indicated.	-BANK #···DD-19(TOTAL 20-BANKS)	
-SEARCH-LINK ON/OFF	BQ··· BQ [CR]	w	BQn LINK OFF···n=0 LINK ON···n=1		
		R	BQn		

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RS-232C COMMAND LIST

		D E131		(DECIMITIEN[CN][EF])	
ITEM	REQUI	ST COM	MAND	SETTING	
IIEM	CMD/H	EADER	R/W	DELIMITTER is added after setting[CR-LF]	NOTE
-SEARCH-LINK BANK # SETTING	BS···	[CR]	w	BSnn···nn=00-19(nn=BANK #) or %%(RESET CURRENT-BANK #) BS %% nn nn···	
	ВЗ	[CR]	R	BS п п···п п···п n···n n(n=0-9 or -)	-BANK #00-19(TOTAL 20-BANKS)
-AUTO-STORE On/OFF	AS AS	[CR]	w	ASn AUTO-STORE OFF···n=0 AUTO-STORE ON···n=I (BANK #=0) AUTO-STORE ON & DELETE MEN···n=2(BANK #=0)	
			R	ASnn=0 or I	
-LEVEL-SCAN	SB···	[CR]	w	SBnnn···nnn=000-255 L-SQ OFF···n=000	
			R	SB nnn or SB+nnn(+…CURRENT AGC-LEVEL≥n)	
-VÒICE-SCAN	SA··· SA	[CR]	w	SAnnn···nnn=000-255 VOICE OFF···nnn=000	
			R	SA nnn or SA+nnn(+···CURRENT VOICE-LEVEL≥nnn)	
-SEARCH DELAY- TIME SETTING	SD··· SD	[CR]	w	SDnn···nn=0.0-9.9(sec) or FF(HOLD)···No need for decimal point DELAY OFF···nn=00 HOLD···nn=FF	
			R	SDn.n	

(DELIMITTER···[CR][LF])

	REQUEST COM	MAND	SETTING	NOTE
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR+LF]	
-SEARCH PAUSE-	SP···	w	SPnn···nn=00-60 (sec) ···00=PAUSE-OFF	
TIME SETTING	SP [CR]	R	Spn	
-START SEARCH	ss	w	SSnnnn=00-19 or BLANK(nn=BANK #)	
-START VFO SEARCH	VS [CR]	w	VSx···x=A,B,C,D,E DEFULT=CURRENT VFO	
-PASS-FREQ SETTING	PS	w	PSnnnnnnnnn (Hz) PSnn.nn (MHz)	-Set up present BANK
-PASS-FREQ SETTING	PW	w	PW···Present receiving FREQ is set up as PASS-FREQ.	×0.
-PASS-FREQ DELETE	PD	w	PDnnmm···nn=00-20(BANK #) mm=00-99(mm=PASS-CH #) PD%%nn···nn=00-20(CURRENT BANK or nn BANK)	-nn=20···VFO
-PASS-FREQ LISTING	PR	R	PRnn···nn=00-20(nn=BANK # or VFO) PRnn mm nnnnnnnnnn PRV mm nnnnnnnnnn	-nn=20····VFO

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RS-232C COMMAND LIST

ITEM	REQUEST COMMAND		SETTING	
	CMD/HEADER	R/W	DELIMITTER is added after setting[CR-LF]	NOTE
-MEM SETTING	MX	w	MXnmm···n=0-9(BANK #) mm=00-99(mm=CH #) RFnnnnnnnnn(Hz) or RFnn.nn AUn STnnnnnn/SHnnnnn····Set up if necessary. MDn,BWn,LPn,HPn,ENn,MPn····Set up if necessary. ATn,AHn,ACn,····Set up if necessary. TMxxxxxxxxx(TITLE)····Set up if necessary.	-Divided with SP(space)MEM FREQ SETTING -LC-CMD···RESET ③
	тм…	w	TMxxxxxxxxx ··· (X=20-5F···ASCII-CODE)	-SP is effective as BLANK.
-MEM LIST	ма…	R	MAn···n=0-9(n=BANK # & CH # =00)··· LIST of 10 CH n···DEFULT==>CURRENT BANK & CH··· LIST of 10 CH MXnnn MPn GAn RFnnnnnnnnnn STnnnnnn AUn MDn ATn TMxxxxxxxx	
MEM-PASS DN/OFF	MP	w	MPn PASS OFF···n=0 PASS ON···n=1 MP%%···PASS-OFF of ALL-MEM(1000-CH)	-When setting of MEM-DATA or Memory recall
	MP [CR]	R	MPn	
-MEM-SEL ON/OFF	GA··· GA··· GA [CR]	w	GAN SELECT OFF···n=0 SELECT ON···n=1 GA%%···SELECT OFF of ALL-MEM	-When setting of MEM-DATA or Memory recall
	av [cu]	R	GAn	
M-SEL LISTING	GR···	w	GRnn MXnmm RFnnnnnnnn TMxxxxxxxx	

(DELIMITTER...[CR][LF])

	REQUEST COMMAND		SETTING	NOTE
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR-LF]	
-MEM-DEL ON/OFF	MQ···	w	MQ···DELETE CURRENT MEM # MQnn···DELETE SETTING CH #(n=00-99) MQ%%n···DELETE ALL-MEM(CURRENT BANK or n BANK)	
-MEM-LINK	GM···	w	GWn···n=0-9	
GROUP #	GM [CR]	R	GMn XDn.n XB+n XA+nnn XPnn XMn MLn BM n n n n n n n n n (n=0-9 or -) GM%%List of 10 groups	
-MEM-LINK ON/OFF	ML···	w	MLn LINK OFF···n=0 LINK ON···n=1	
	ML [CR]	R	MLn	
-MEM-SCAN LINK BANK # SETTING	вм	w	BMn···n=0-9(n=BANK #) or %%(RESET CURRENT-BANK #) BM %% n n	
	BM [CR]	R	BM n n···n(n=0-9)	
-MODE-SCAN ON/OFF	хм	w	XMn···0-7&F FM···n=0 AM···n=1 LSB···n=2	
			USB···n=3 CW···n=4 ALL···n=F(ALL-MODE)	
	XM [CR]	R	XMn	

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RS-232C COMMAND LIST

	REQUEST COM	IMAND	SETTING	
ITEM	CMD/HEADER	R/W	DELIMITTER is added after setting[CR-LF]	NOTE
-LEVEL-SCAN	хв	w	XBnnn···nnn=000-255 L-SQ OFF···nnn=000	
	XB [CR]	R	XB n or XB+n(+···CURRENT AGC-LEVEL≥n)	
-VOICE-SCAN	ха	w	XAnnn VOICE OFFnnn=000	
	XA [CR]	R	XA nnn or XA+nnn(+···CURRENT VOICE-LEVEL≥n)	
-N-SCAN DELAY- TIME SETTING	XD	w	XDnn···nn=0.0-9.9(sec)···No need for decimal point DELAY OFF···nn=00	
	XD [CR]	R	XDn.n	
-M-SCAN PAUSE-	хр	w	XPnn···nn=00-60 (sec) ···00=PAUSE-OFF	
TIME SETTING	XP [CR]	R	XPnn	
-START M-SCAN	MS···	w	MSn···n=0-9 or BLANK(n=BANK #)	
-START SEL-SCAN	SM···	w	SM	
-M-CH MODE	MR···	w	MRnmm···n=0-9(BANK #) mm=00-99(mm=CH #)	

-Communication parameters

(i)Baud rate: 4800,9600,19200 selectable

②Data bits: 8 BIT
③Stop bit: 2 BIT
④Parity check None
· ⑤Flow control Xon

-Change mode from REMOTE to LOCAL

①"EX"command: to LOCAL mode
②"QP"command: to POWER-OFF mode

(3)[ENT]key: to LOCAL mode
(4)[POWER]key: to POWER-OFF mode

-Change mode from LOCAL to REMOTE

AR5000 becomes REMOTE mode when either command is sent.

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	AGC CONTROL
	······EXIT-IF ON/OFF ········
	ANT SÈLECT
-AS ······SEARCH······	AUTO-STORE ON/OFF(GS-CMD)
-AT	ATT ON/OFF
-AU	AUTO ON/OFF
-BN	BANK SELECT
-BM ······M-SCAN ······	BANK # SETTING of LINK(GM-CMD)
-BQ ······SEARCH······	SEARCH LINK ON/OFF(GS-CMD)
-BS ······SEARCH·····	BANK # SETTING of LINK(GS-CMD)
-BW	·····BW SELECT ·····
-AF	AFC ON/OFF
	······LISTING PROM-DATA ······
	·····DE-ENPHASIS······
-EX	······EXIT (END of REMOTE)
-GA ·······M-SEL ······	SELECT-CH
	M-SCAN GROUP #
-GR ······M-SEL ········	LISTING of SELECT-CH
-GS ······SEARCH······	······SEARCH GROUP #·····
-HP	····················HPF SELECT ····································
-DS	······················CYBER-SCAN ON/OFF ···································
	······CONT.,SEND AGC-LEVEL ······
-LM	·····SEND AGC-LEVEL······
-LP	······LPF SELECT ······
-LS	·····SPE-SIG FREQ ······
-MA MEM	······READ ALL MEMORY-DATA ·····
-MD	MODE SETTING
-ML ····· M-SCAN ·····	(GM-CMD)
-MP MEM	MEM PASS ON/OFF
	MEM DELETE

-MR	MEM
	M CCAN CTADT
	WRITE_NEMORY
	PLI ETE DACC-EDEN
	CEND ALL DACC-EDED
	DACC CDEA CETTING
	DAGE EDEC ANTO SETTING
	DTHE ON OFF
	DELETE CEADOU_DATA
	DY EDEC SETTING
	CEND DV DATA
	DEMOTE CO-DATA
	UAL E-CTED EDEN
	VOICE ON OFF
	COLUMN ON OFF
-DD	VFO
	(G5-UMU)
-SB	SEARCH SQ-LEVEL ON/OFF (GS-CMD)
-SC	SCRAMBLE DATA (20 0MP)
-SD	SCRAMBLE DATASEARCH
-SE	SEARCH SEARCH SEARCH DATA SETTING (SE CMD)
-SL	SEARCH————————————————————————————————————
-SP	M-SEL
-SR	SEARCH SEARCH DATA LISTING
-SS	SEARCH SEARCH START SEARCH START SEARCH START
-ST	SEARCH SEARCH SEARCH STAND
-SU	SEARCH UPPER FREQ SETTING (SE-CMD)
-SJ	SEARCH SUB-STEP FREQ SETTINIG

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-TM	MEM
-TT	SEARCH-TEXT
-TU	
-VA	······ VFO ········VFO-A FREQ SETTING ······
-VB	······ VFO ··········VFO-B FREQ SETTING······
-VC	VFOVFO-C FREQ SETTING
-VD	····· VFO ······VFO-D FREQ SETTING ······
-VE	····· VFO ······VFO-E FREQ SETTING ······
-VL	BEEP-VOLUME SETTING
-VR	CPU VERSION
-VS	······VFO ···········VFO-SEARCH START······
-XA	M-SCANVOICE ON/OFF(GM-CMD)
-XB	M-SCANSQ-LEVEL ON/OFF(GM-CMD)
-XD	M-SCANDELAY-TIME(GM-CMD)
-XM	M-SCANMODE-SCAN & ON/OFF(GM-CMD)
-XP	M-SCANPAUSE-TIME & ON/OFF(GM-CMD)
-QP	POWER OFF